

**Coastal Impact Assistance Program (CIAP)
Project Nomination
Executive Summary
(May 22, 2006)**

Project Title:

Restoration of Louisiana Coastal Marsh Using Earthen Terraces

Entity/Individual nominating the project:

Ducks Unlimited, Inc.

Contact Information (Name, Address, Telephone, Email):

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Total CIAP Funds Requested:

\$7,935,291

Parish CIAP Funds Proposed:

\$0.00 dollars

State CIAP Funds Requested:

\$7,935,291

Infrastructure Funds Proposed:

\$0.00 dollars

Description and Location of Project:

All project sites are located in Cameron Parish. The first proposed project area (Black Lake) is adjacent to State Only Project C/S-02. The second proposed project area (Jim Bel) is located within State Only Project C/S-02. The third proposed project area (Miami/USFWS) is located adjacent to the CWPPRA project titled Cameron Creole Watershed Hydrologic Restoration (FC/S-17) and State Only Project C/S-04a

Project Type (from list of authorized CIAP fund uses):

The Restoration of Louisiana Coastal Marsh Using Earthen Terraces consists of conservation, restoration, and protection of Southwestern Louisiana coastal wetlands.

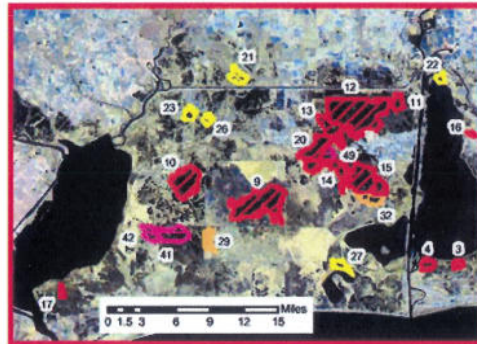
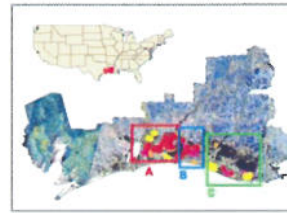
Project Justification:

The purpose of the terraces is to reduce wind fetch and wave energy. Reducing the effects of wind and waves typically increases water clarity dramatically. After the water clears, sunlight can reach the marsh pond bottom and submerged aquatic vegetation can quickly return to the terraced areas. Additional research is needed to firmly establish the relationship between terraces and submersed aquatics. However, many visual observations suggest submersed aquatic vegetation responds when terraces have been installed to create proper conditions for growth. The terraces also dramatically reduce wave action, allowing emergent vegetation to spread in the large open water areas. Large ponds with submersed aquatics represent the first stage of plant succession toward a marsh interspersed with many small shallow ponds.

Project cost share (Types and amounts of non-CIAP funds proposed, if any):

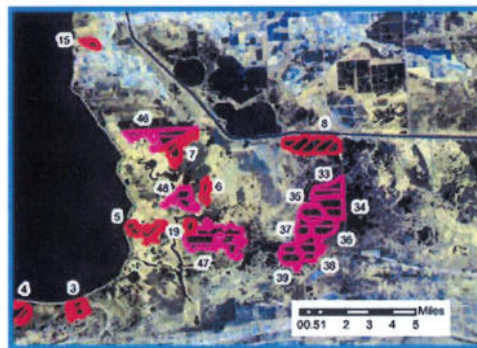
Ducks Unlimited is positioned to compete for additional sources of restoration dollars including North American Wetlands Conservation Act grants that require sources of non-federal match. Hence, funding from the Coastal Impact Assistance Program will be leveraged with other Ducks Unlimited and conservation partner funds to secure future North American Wetlands Conservation Act grants to enable the restoration of additional coastal marsh in Louisiana.

Priority Marsh Terracing Areas SW LA Terracing Working Group



Legend

- High Priority Sites (31,423 acres)
- Medium Priority Sites (12,060 acres)
- Low Priority Sites (1,845 acres)
- Completed/In Progress Sites (12,244 acres)



Id	Site	Acres
1	Rockefeller/East End Locks	88.79
2	Rockefeller/Superior	122.59
3	East Cove/Lambert Blowout	319.79
4	East Cove/No Name	573.15
5	East Cove/Mangrove	516.04
6	Pichot Ridge	171.78
7	Big Pasture	451.03
8	Hebert/Precht	1020.44
9	Sabine Unit 3	5603.78
10	Green's Lake	3117.46
11	North Black Lake	682.80
12	West Black Lake	8239.61
13	Polemo	1601.16
14	West Hackberry/Sabine	1884.80
15	Brown's Lake	4042.34
16	Duhon	143.07
17	Garrison South	124.33
18	Garrison North	88.45
19	East Cove/ North Boundary 2	142.50
20	West Hackberry/Belt 2	2486.75
21	Webb Gully	834.57
22	Black Bayou Cutoff	318.93
23	West Perry Ridge	606.20
24	Miller Property	4253.88
25	Miller Property	640.46
26	South Perry Ridge	392.08
27	Mud Lake	579.92
28	South Pecan Island 2	4424.48
29	Sabine Unit 4	549.53
30	Rutherford Beach	176.09
31	Lacassine Point	137.01
32	Sabine Unit 1A	982.74
33	South Boudreaux Lake 1	461.42
34	South Boudreaux Lake 2	587.74
35	Arco 1	384.68
36	Arco 2	434.04
37	Arco 3	291.35
38	East Broussard Lake 1	521.23
39	East Broussard Lake 2	444.55
40	South Pecan Island 1	1991.88
41	Willow Bayou East	1797.09
42	Willow Bayou West	843.44
43	Rockefeller Deep Lake	596.71
44	Rockefeller Deep Lake	48.20
45	Rockefeller/West of Deep Lake	131.70
46	Grosse Savanne	733.57
47	East Cove/North Boundary 1	1397.37
48	North Prong	476.04
49	West Hackberry/Belt 1	671.83
50	South Pecan Island 3	430.68

Figure 1. Terrace priority sites identified by SW La Terracing Working Group

Proposal**Area A:** Jim Bel 07**Location:** Cameron Parish**Description:** The project area is located just north of Sabine National Wildlife Refuge west of Hwy 27 near the town of Hackberry, Louisiana. The area is classified as intermediate marsh comprising 1,055 acres of open water generally void of submersed aquatic vegetation.**Landowner:** Jim Bel**DU Contact:** Jim Bel**Linear Feet:** 74,500 linear feet**Acres:** 1,055 acres**Comments:** This project will compliment the efforts of LDNR project CS-02 as well as the water control structures installed near the Refuge headquarters, West Cove, and Hog Island Gully. In addition, the Jim Bel terraces will be located north west of a beneficial use of dredge material project constructed on Sabine National Wildlife Refuge (figure 2).**Proposal****Area B:** Black Lake 07**Location:** Cameron Parish**Description:** The project area is located just north of LDNR project C/S-02 due west of Black Lake near Hackberry, Louisiana. The area is classified as intermediate marsh comprising 4,600 acres of open water with minimal scattered islands generally void of submersed aquatic vegetation.**Landowner:** Kurt Marcantel**DU Contact:** Kurt Marcantel**Linear Feet:** 286,000 linear feet**Acres:** 4,600 acres**Comments:** This project will compliment the efforts of the landowner's property management in restoring this site to emergent and submerged aquatic vegetation. In addition, this terracing effort will compliment the other terracing efforts and beneficial use of dredge material sites that are due south of this project area (figure 3).**Proposal****Area C:** Miami Corporation/USFWS 07**Location:** Cameron Parish**Description:** The project area is located just east of Calcasieu Lake along the border of Miami Corporation and the Cameron Prairie National Wildlife Refuge (NWR) northern border within the Cameron-Creole Watershed. The area is classified as brackish marsh comprising 508 acres of open water generally void of submersed aquatic vegetation.**Landowner:** Miami Corporation**DU Contact:** Roger Vincent**Linear Feet:** 29,500 linear feet**Acres:** 508 acres

Comments: This project will compliment the efforts recently completed by the partners associated with the North American Wetlands Conservation Act grant titled Louisiana Coastal Wetlands I, II, and III (figure 4).

The project acres included in this proposal are “open water” areas only. It is understood that these terraces will positively impact the surrounding marshes adjacent to the project areas. Land loss rates indicated in the Coast 2050 plan for the Calcasieu/Sabine Basin (Jim Bel, Black Lake, Miami Corporation/USFWS) is 2.5 square miles per year. A great deal of the interior marsh loss is caused by wind generated wave energy in these large open water areas. Terraces will reduce wind generated wave energy by the actual terraces themselves and by the presence of submersed aquatic vegetation in the open water.



Jim Bel

CIAP Proposal 2007

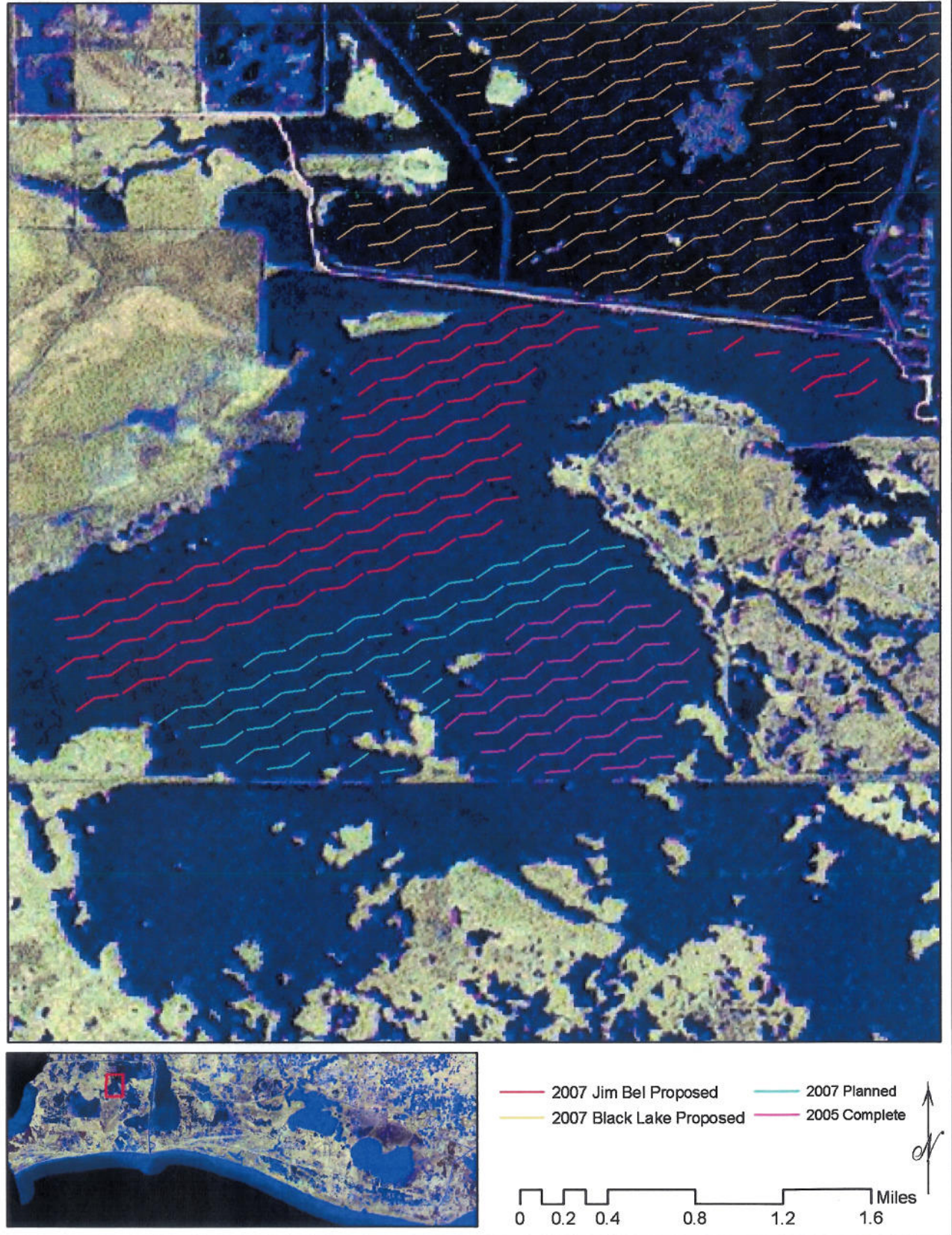


Figure 2. Jim Bel proposed project area.

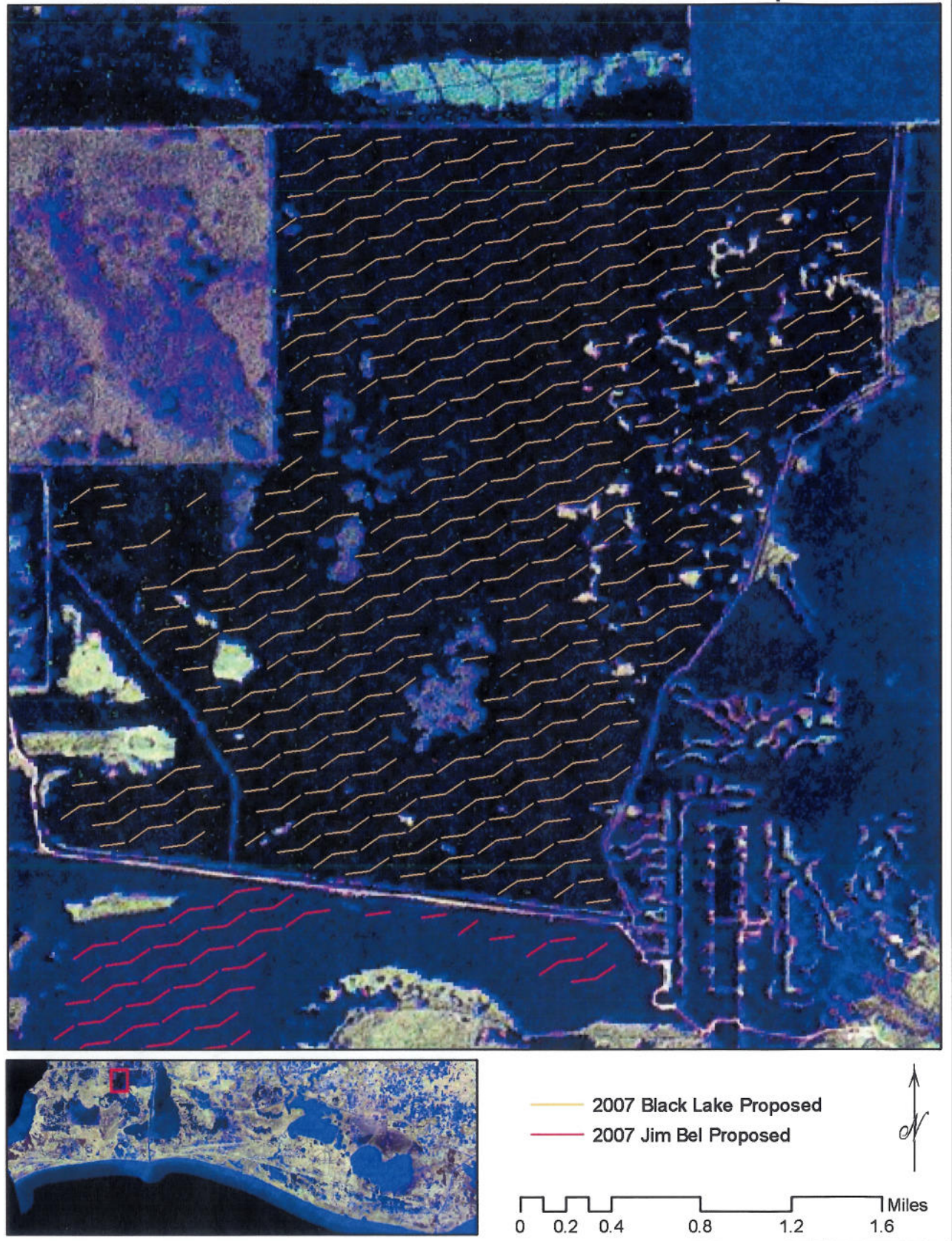


Figure 3. Black Lake proposed project area.

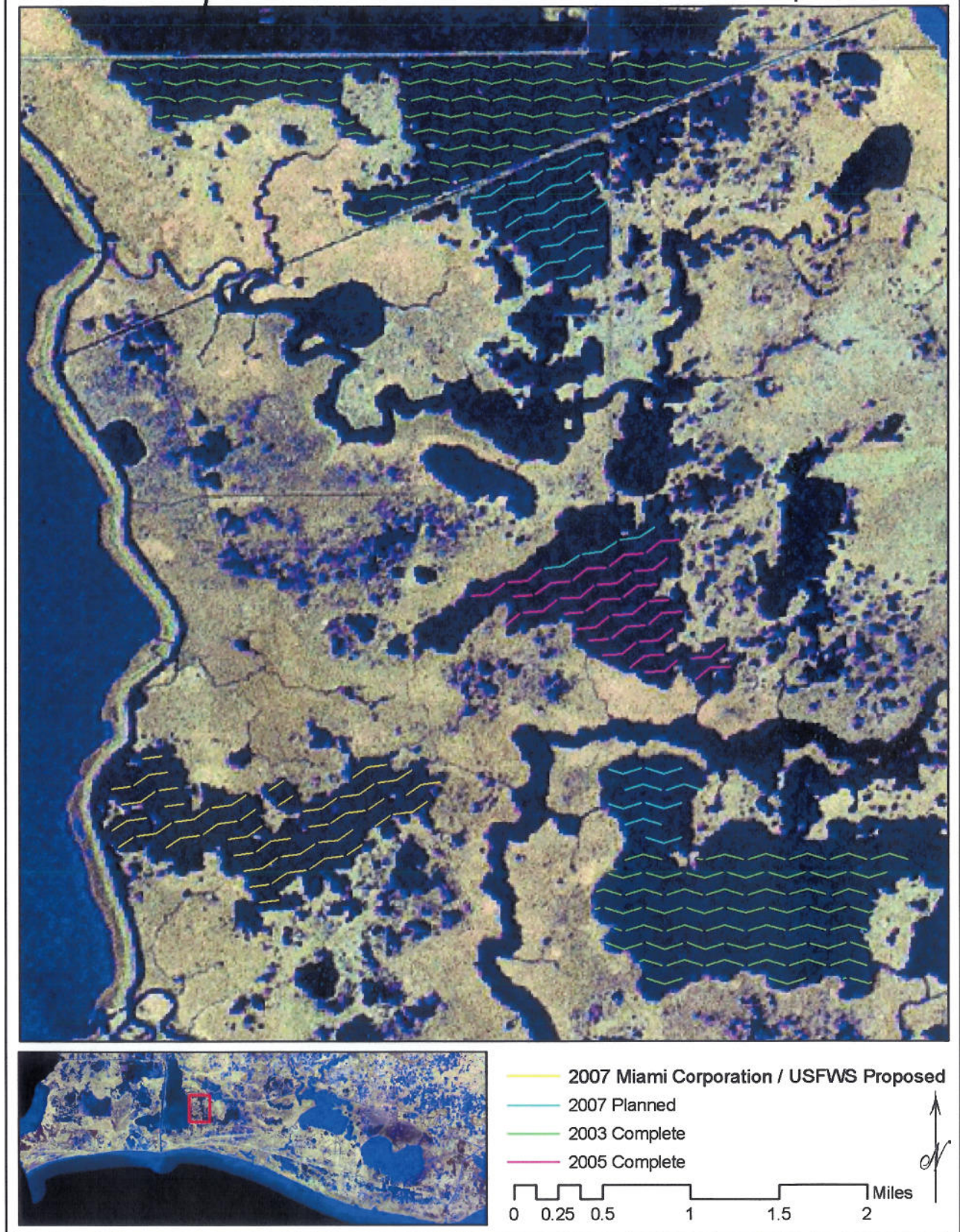


Figure 4. Miami Corporation/U.S. Fish and Wildlife Service proposed project area.